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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HEWLETT-PACKARD COMPANY
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EXAMINER

SARPONG, AKWASI

ART UNIT	PAPER NUMBER
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2609

MAIL DATE	DELIVERY MODE
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09/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,392

Applicant(s)

BENEDICTO ET AL.

Examiner

Akwasi M. Sarpong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because they are without labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether limitation "a dedicated preview image sensor" in both claims 2 and 3 refers to the same limitation "a dedicated preview image sensor" as claimed in claim 1. As such Examiner will prosecute limitation "a dedicated preview image sensor" as the same limitation "a preview image sensor", as in claims 2 and 3.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 8, 13, 14, 27, 31, 33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuan (2004/0233482).

Claim 8, Kuan discloses a system for scanning media, the system comprising:
dedicated means for preview scanning (Paragraph 0035 Lines 1-4, Fig. 5

Element 42, 44 and 46)

means for pre-processing image data obtained from the means for preview scanning (Paragraph 0035 Lines 17-21, Fig. 5 Element 24)

means for determining settings to apply during a final scan (Paragraph 0035 Lines 13-16 Fig. 5 Element 42) and

means for final scanning the media (Paragraph 0035 Lines 17-21, Fig. 5 Element 24).

Claim 13, Kuan (Fig. 5 Element 26) discloses wherein the means for pre-processing comprises an image processor of a scanning unit.

Claim 14, "wherein pre-processing comprises at least one of performing automatic copy type detection, automatic document size detection, automatic skew detection, zoning analysis, background/foreground determination, document classification, template matching, and an ink requirement estimate" reads on Kuan's zone analysis by indicating a region desired to the user. (Sect. 0035, Lines 13-16).

Claim 27, Kuan discloses an imaging device (Fig. 7 Element 50), comprising:
a scanning unit (Fig. 8 Element 23) including a dedicated preview scanning module (Fig. 8 Element 26),

a final scanning module (Fig. 8 Element 24 and 26), and an image processor that is configured to pre-process image data collected by the dedicated preview-scanning

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module to determine settings to be use to operate the final scanning module (ect. 0036

Lines 12-15 Fig. 8 Element 30) and

a printing module that is configured to generate hard copy documents from received image data. (Kuan teaches a copier and copiers inherently have print modules).

Claim 31, Kuan discloses wherein the final scanning module comprises a high-resolution image module. (Fig. 8 Element 26 and 24).

Claim 33, Kuan discloses a platen on which media may be placed, wherein the dedicated preview scanning module is positioned directly opposite the platen such an image sensor of the dedicated preview scanning module directly faces the platen. (Fig. 8 Element 28).

Claim 34, "wherein the dedicated preview scanning module is positioned at an angle relative to the platen such that an image sensor of the dedicated preview scanning module does not directly face the platen" reads on Kuan's Fig. 8 El. 28 by being able to capture the entire platen.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-12, 15-26, 28-30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuan in view of Cardot (6831761).

Claim 1, Kuan discloses a method for scanning media (Fig. 6), the method comprising

scanning a platen (Fig. 3 shows that El. 25 is placed on the platen) using a dedicated preview image light (Fig. 3 El. 28, Paragraph 002) and

pre-processing image data obtained through the scanning of the platen to automatically determine settings to apply during a subsequent final scan (Paragraph 0035 Lines 13-16).

(Kuan discloses a single image sensor (Fig. 8 El. 28) with two lights (Fig. 8 Elements 24 and 26))

Kuan does not disclose a dedicated preview image sensor.

Cardot discloses double image sensors (Fig. 2A El. 27 and 29). Therefore it will be obvious to one ordinary skill in the art at the time the invention was made to modify

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Kuan's single sensor with Cardot double sensor to share the burden of Kuàn's single sensor.

Claim 2, Kuan (Fig. 8 Element 26) in view of Cardot (Column 4 Lines 5-10) discloses wherein scanning a platen comprises scanning the platen using a dedicated preview image sensor having a resolution of approximately 30-150 pixels per inch (ppi).

Claim 3, Kuan (Sect. 0029, Fig. 5 Element 26) in view of Cardot discloses wherein scanning a platen comprises scanning the platen using a dedicated preview image sensor that is fixed within a scanning unit of an imaging device.

Claim 4, Kuan (Sect. 0035 Lines 1-4, Fig. 4) discloses wherein scanning a platen comprises capturing an image of the entire media using the dedicated preview image sensor instantaneously.

Claim 5, "wherein pre-processing comprises at least one of performing automatic copy type detection, automatic document size detection, automatic skew detection, zoning analysis, background/foreground determination, document classification, template matching, and an ink requirement estimate" reads on kuan's zone analysis by indicating a region desired to the user. (Sect. 0035, Lines 13-16).

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Claim 6, Kuan (Fig. 8 Element 23) in view of Cardot (Fig. 2A El. 27) discloses wherein scanning the media at a relatively high resolution using a high-resolution image sensor that is separate from the dedicated preview image sensor.

Claim 7, Kuan (Sect. 0035 Lines 13-16) in view of Cardot discloses wherein scanning the media at a relatively high resolution comprises scanning the media using at least one setting that was determined through the pre-processing. (Kuan teaches that region of the document that is desired based on the preview result can be indicated and therefore means that he analyzing that zone or region.)

Claim 9, Kuan discloses wherein the means for preview scanning comprise a dedicated preview image light (Fig. 5 Element 26).

Kuan does not disclose an image sensor dedicated for previewing the image.

Cardot disclose double image sensor (Fig. 2A Elements 27 and 29). Therefore it will be obvious to one ordinary skilled in the art at the time of the invention to modify Kuan's lights with one sensor with Cardot's double sensors in order to share the burden of Kuan's single sensor.

Claim 10, Kuan (Fig. 8 Element 26) in view of Cardot (Col. 4 Lines 5-10) discloses wherein the dedicated preview image sensor has a resolution of approximately 30-150 pixels per inch (ppi).

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Claim 11, Kuan (Fig. 5 Element 26) in view of Cardot further discloses wherein the dedicated preview image sensor is fixed within a scanning unit of an imaging device.

Claim 12, Kuan (Sect. 0022 Lines 7-8 Fig. 4) in view Cardot discloses wherein the dedicated preview image sensor is configured to capture an image of the media instantaneously.

Claim 15, Kuan discloses wherein the means for final scanning comprise a high-resolution image light (Sect. 0022 Lines 1-3 Fig. 5 Element 24).

Kuan does not disclose a high-resolution image sensor.

Cardot disclose a high-resolution image sensor (Fig. 2A El. 27). Therefore it will be obvious to one ordinary skill in the art at the time the invention was made to modify kuan's light with Cardot's sensor in order to scan faster as the same time have a good quality document.

Claim 16, Kuan discloses wherein the means for preview scanning comprise a dedicated preview image light with a single photo sensor and the means for final scanning the media comprise a high- resolution image light with the said single photo-sensor (Sect. 0022 Lines 1-4 Fig 4 Elements A and B).

Kuan does not disclose two separate sensors having a resolution of approximately 75 points per inch (ppi) and 600 ppi.

Cardot discloses two separate sensors having a resolution of approximately 75 points per inch and 600 ppi (Column 4 Lines 5-10, Fig. 2A Elements 27 and 29).

Therefore it will be obvious to one ordinary skilled in the art at the time the invention was made to modify Kuan single photo sensor with Cardot's double sensor so that the burden on Kuan's photo-sensor can be shared among Cardot's two sensors.

Claim 17, Kuan discloses a scanning unit (Fig. 8 Element 50) for use in an imaging device, comprising:

- a dedicated preview scanning module (Sect. 0027, Fig. 8 Element 23) comprising a first image light having a first resolution;(Sect. 0037 Fig. 8 Element 26)

- a final scanning module (Sect. 0022, Lines 21-27, Fig. 8 Element 23) comprising a second image light (Fig. 8 Element 24 and 26) having a second resolution that is higher than the first resolution (Paragraph 0037 Lines 6-15) and

- an image processor that is configured to pre-process image data collected by the dedicated preview scanning module to determine settings to be used to operate the final scanning module. (Sect. 0022 Lines 21-31, Fig. 8 Element 30).

Kuan does not disclose two separate photo-sensors.

Cardot discloses two separate sensors. Therefore it will be obvious to one ordinary skilled in the art at the time of the invention to modify Kuan's lights with a single sensor with two separate sensors as taught by Cardot to share the burden of one photo-sensor as disclosed by Kuan.

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Claim 18, Kuan in view of Cardot (Fig. 2 Element 23 and 25) discloses wherein the dedicated preview-scanning module is fixed within the scanning unit so as not to be movable within the unit.

Claim 19, Kuan (Fig. 8 Element 23) in view of Cardot discloses wherein the dedicated scanning module is displaceable to facilitate scanning.

Claim 20, Kuan (Sect. 0021 Lines 6-7 Fig. 8 Element 25 and 28) in view of Cardot further discloses a platen on which media may be placed, wherein the dedicated preview-scanning module is positioned directly opposite the platen such that the first image sensor directly faces the platen.

Claim 21, "wherein the dedicated preview scanning module is positioned at an angle relative to the platen such that the first image sensor does not directly face the platen" reads on Kuan's photosensor as disclosed in Fig. 8 Element 28.

Claim 22, "wherein the dedicated preview scanning module further comprises a wide angle lens" reads on Kuan's photo sensor because the lens in the sensor is able to capture the whole image of Element 25 in Fig. 8.

Claim 23, Kuan (Sect. 0022 Lines 21-31 Fig. 8 Element 30) in view of Cardot (Fig. 3 Element 45) discloses wherein the image processor comprises at least one processing algorithm and a buffer.

Claim 24, Kuan (Fig. 8 Element 26) in view of Cardot further discloses wherein a light source that is configured to facilitate delivery of reflected light to the first image sensor of the dedicated preview-scanning module.

Claim 25, Kuan (Fig. 8 Element 26) in view of Cardot (Column 3 Lines 52-54, Fig. 1 Element 25) further discloses a reflector that is configured to facilitate delivery of reflected light to the first image sensor of the dedicated preview-scanning module.

Claim 26, Kuan (Sect. 0022 Lines 1-4 Fig 4 Elements A and B) in view of Cardot (Column 4 Lines 5-10, Fig. 2A Elements 27 and 29) discloses wherein first image sensor has a resolution of approximately 75 points per inch (ppi) and the second image sensor has a resolution of approximately 600 ppi.

Claim 28, Kuan discloses wherein the dedicated preview-scanning module comprises a low-resolution image light.

Kuan does not disclose a sensor.

Cardot disclose a sensor. Therefore it will be obvious to one ordinary skilled in the art at the time the invention was made to modify Kuan's double light and s single

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photo sensor with two photo sensors as taught by Cardot to share the burden among the two sensors.

Claim 29, Kuan (Sect. 0022 Lines 1-4 Fig 8 Elements 26 and 24) in view of Cardot (Col. 4 Lines 5-10) discloses wherein the means for preview scanning comprise a dedicated preview image sensor having a resolution of approximately 75 points per inch (ppi) and the means for final scanning the media comprise a high- resolution image sensor having a resolution of approximately 600 ppi.

Claim 30, Kuan (Fig. 5 Element 26) in view of Cardot further discloses wherein the dedicated preview image sensor is fixed within a scanning unit of an imaging device.

Claim 32, Kuan discloses a final scanning module comprising a high-resolution image module (Sect. 0037 Lines 12-15).

Kuan does not disclose that his final scanning module is a high-resolution image sensor.

Cardot discloses, wherein the high-resolution image sensor has a resolution of approximately 600 points per inch (ppi) (Column 4 Lines 5-10). Therefore it will be obvious to one ordinary skilled in the art at the time the invention was made to Kuan's final scanning module with Cardot's high-resolution image sensor of approximately 600ppi so that you will know the resolution at which you scan.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akwasi M. Sarpong whose telephone number is 571-270-3438. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HAI Tran can be reached on 571-272-7305. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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August 31 2007


HAI TRAN
PRIMARY EXAMINER